IN THE CLAIMS

1. (currently amended)   A method for emulating execution of instructions designed for a target system in a host system, comprising the steps of:

determining a variance in execution speed between the target system executing said instructions and the host system emulating execution of said instructions; and

dynamically adjusting the execution speed of the host system based on the variance to conform to the execution speed of the target system.

2. (currently amended)   The A method of as in claim 1, wherein the step of determining the variance comprises the steps of:

identifying a block of instructions and associated processing time required by the target system to execute said block of instructions;

determining an actual real time for executing the block of the instructions by the host system;

comparing the processing time to the actual real time to determine the variance.

3. (currently amended)   The A method of as in claim 2, wherein the execution speed of the host system for a subsequent block of instructions is adjusted based on the variance determined for a preceding block of instructions.

4. (original)   A method for simulating an operating speed of

processing in an emulated target system corresponding to a rate

of execution of instruction cycles on at least one host system,

comprising the steps of

defining a benchmark sample by selecting a reference

determined by an arbitrary time quantum of said speed;

multiplying said reference by said rate of execution of

instruction cycles;

tracking said instruction cycles executed and determining

whether a threshold value has been exceeded;

interrupting said processing when said threshold value has

been exceeded;

determining an elapsed time period by querying a timing

source which is associated with the host system an unaffected by

said processing;

determining a timing reference by comparing said elapsed

time with said time quantum; and,

using said timing reference to adjust said rate so as to

simulate said operating speed of the target system.

5. (new) The method of claim 1, wherein the step of determining

said variance comprises the steps of:

determining an execution speed of the host system emulating

execution of said instructions;

determining an execution speed of the target system; and

comparing said execution speed of the host system with the execution speed of the target system.

6. (new) The method of claim 1, wherein the step of dynamically adjusting the execution speed of the host system comprises the steps of:

pre-determining an acceptable variance in execution speed between the host system and the target system; and

when the host system is emulating execution of said instructions slower than the target system executes said instructions by more than said pre-determined acceptable variance, increasing the speed of emulation execution by the host system; or

when the host system is emulating execution of said instruction faster than the target system executes said instructions by more than said pre-determined acceptable variance, decreasing the speed of emulation execution by the host system.

7. (new) The method of claim 1, wherein said variance is determined as a ratio between speed of the target system executing said instructions and the speed of the host system emulating executing said instructions.